SYSTEM AND METHOD FOR IEEE 802.11 NETWORK ADMISSION CONTROL

ABSTRACT OF THE INVENTION

A system and method are provided for periodic stream admission control in an IEEE 802.11 network. The method comprises: at an access point (AP), receiving a transmit specification, including a requested bandwidth, from a quality of service station (QSTA); computing T_{temp}, the time equivalent to the requested bandwidth; computing T_{all}, the time already allocated; and, computing T_{res}, the total time available. If $T_{temp} + T_{all} < T_{res}$, then the QSTA is admitted. If $T_{temp} + T_{all} > T_{res}$, the QSTA is not admitted. Some aspects of the method further comprise: monitoring the bandwidth of the admitted QSTA. In another aspect, the method: determines the bandwidth required by the admitted QSTA; and, modifies the bandwidth of the admitted QSTA in response to the determined QSTA requirements. In one aspect, the method: monitors channel conditions; and, modifies the bandwidth of the admitted QSTA in response to the channel conditions.